

MAINTENANCE AND STORAGE FACILITIES  
LAYOUT AND LOCATION PLANS  
MEMORANDUM

PRODUCT 9.3 Final

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MONOLULU HIGH-CAPACITY TRANSIT CORRIDOR  
ALTERNATIVES ANALYSIS / DISCUSS ENVIRONMENTAL IMPACT STATEMENT

prepared for:  
City and County of Honolulu

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# **Maintenance and Storage Facility General Layout and Location Plans Memorandum Honolulu High-Capacity Transit Corridor Project**

**May 14, 2007**

Prepared for:  
City and County of Honolulu  
and  
Federal Transit Administration

Prepared by:  
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## Acronyms Used in this Document

AA	Alternatives Analysis
BMPs	Best Management Practices
DHHL	Department of Hawaiian Home Lands
HCDA	Hawai‘i Community Development Authority
HECO	Hawaiian Electric Company
LPA	Locally Preferred Alternative
MOS	Minimum Operable Segment
SOBA	Southern O‘ahu Basal Aquifer
TOD	Transit-Oriented Development
UH	University of Hawai‘i

# ***Chapter 1                      Maintenance and Storage Facility Evaluation Methods***

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## **Purpose of This Memorandum**

This memorandum has been prepared to present and summarize the Maintenance and Storage Facility alternatives being considered during the Alternatives Analysis (AA) phase of the project. This memorandum provides additional information and analysis of the three sites under consideration for construction of a maintenance and storage facility that would support the Fixed Guideway Alternative.

As part of the Fixed Guideway Alternative the AA report describes a 28-mile Full Corridor Alignment and a shorter 20-mile Alignment. In December 2006, the City Council selected a Locally-Preferred Alternative (LPA) that adds segments to the Full Corridor Alignment. The new segments include the Kamokila Boulevard/Farrington Highway alignment, the Salt Lake Boulevard (to Dillingham) alignment, and the Waikiki Spur. All alignments included in the City Council LPA are illustrated in Figure 1-1 and add up to 37 miles of guideway. Although City Council has not yet selected a Minimum Operable Segment (MOS), the MOS under consideration is a 20-mile alignment that follows the LPA alignment and extends from UH West Oahu at the 'Ewa end and Ala Moana Center at the Koko Head end.

## **Maintenance and Storage Facility Evaluation Methods**

The document compares and contrasts the three potential maintenance and storage facility locations but does not identify a preferred alternative. The categories of comparison are the same as those used to screen the overall selection of the LPA. The categories considered include:

- Engineering feasibility
- Air quality
- Energy use
- Hazmat
- Historical and cultural considerations
- Land use
- Natural resources
- Noise and vibration
- Social elements
- Traffic
- Visual impacts

- Water resources
- Cost



## ***Chapter 2***

## ***Summary of Maintenance and Storage Facility Assessment***

Three potential maintenance and storage facility sites have been identified for consideration. The three locations are illustrated in Figure 2-1 and include:

- Waiawa Site
- Farrington Highway Site
- Kalaeloa Site

Conceptual layouts for each of the three potential maintenance and storage facilities are provided in Figure 2-2 (Waiawa Site), Figure 2-3 (Farrington Highway Site), and Figure 2-4 (Kalaeloa Site). During the Preliminary Engineering phase of the project these conceptual layouts would likely be revised to optimize the design for the technology selected (guided bus, light rail, monorail, magnetic levitation, or rapid rail).

Of the three sites, the Farrington Highway and Kalaeloa sites have some flexibility with respect to actual size and limits of the location and more significantly with respect to the geometry of the tracks within each site. For instance, the Farrington Highway site could be shifted to the east or to the west and expanded or contracted provided it generally remains between the boundary of the Hawaiian Electric Company (HECO) switch yard and H-1 Freeway. The Kalaeloa site also has some flexibility because the surrounding area, roads, and proposed developments are only conceptual as part of the Kalaeloa Master Plan. The Waiawa site, on the other hand, has more defined limits due to the surrounding development and the limitations imposed by the topography; any modifications to the boundary and size of the site will incur significant cost.

The following sections compare and assess each of the three potential maintenance and storage facility sites for each of the evaluation criteria.

### **Engineering Feasibility and Design**

Conceptual design for each of the three maintenance and storage facility sites was based primarily on a heavy rail geometric criterion, as this will provide the most conservative layout. The design requirements for this type of car are more restrictive than other possible technologies under consideration for the system. All three of the potential maintenance and storage facilities meet the general engineering requirements based on geometric criteria for a heavy rail. The primary requirement is that the site accommodate the required facilities to support and store at least 100 cars.

#### ***Connection with Mainline***

All of the concept layouts for the sites were configured to facilitate the entry and exit to the maintenance and storage facility from the mainline based on the horizontal and vertical geometry as shown on the Plans and Profiles of the corridor where the site is located. At the point on the mainline where the track enters or exit, special trackwork is



required. The special trackwork for light rail or heavy rail technology requires fairly restrictive geometric constraints on the mainline. These constraints include a longer stretch of horizontal tangent and a vertical grade of less than 1%. The traffic concept associated with each site requires train cars to negotiate a scissors on the mainline and/or perform some reversing movements on the mainline in order to enter and exit the maintenance and storage facility. This traffic movement is not uncommon on similar track configurations on existing light and heavy rail transit systems in other cities. However, as the design progresses and with expected refinement to the horizontal and vertical geometry of the corridor, other alternative track configurations and traffic movements would potentially present themselves. In terms of ease of access to and from the mainline, and costs associated with that infrastructure, there are minor differences between the current conceptual site layouts. Table 2-1 summarizes some of the pertinent information related to these connections.

**Table 2-1. Summary of Mainline Connectivity**

<b>Facility</b>	<b>Nearest Planned Station</b>	<b>On LPA Route?</b>	<b>Approximate Track Length Between LPA Mainline and Facility (feet)</b>	<b>Grade Separation Issues?</b>
Waiawa	Leeward Community College	Mainline of 37-mile LPA and 20-mile alignment passes through site.	0	No, all possible alignments are at grade and no road crossings are required.
Farrington Highway	Farrington / Horton	Near (separated by Farrington Highway and 500-foot wide parcel) 37-mile LPA and 20-mile alignment.	1,540 or 2,500, if at-grade	If alignment is at-grade, then spur would have to occur further Koko Head where the mainline is on the mauka side of Farrington Highway to avoid grade separation issues.
Kalaeloa	Saratoga / Wākea	Adjacent to 37-mile LPA but not close to 20-mile alignment.	1,870	Possibly, if alignment is at-grade then grade separation may be required at a planned future street.

The Waiawa maintenance and storage facility has the best connection with the mainline because any and all possible alignments pass through the facility and those alignments are at-grade where they pass through the facility. The other two maintenance and storage facility sites would require relatively longer spur off the mainline.

The Farrington Highway site is easily accessible if the rail alignment along the makai side of Farrington Highway is elevated. If the at-grade mainline alignment were selected for this area, then the connection to the mainline would be longer (about 2,500 feet) and would potentially be located from the east, where the mainline is located on the mauka side of Farrington Highway. In either case, the long spur would potentially detract from development opportunities for the area immediately adjacent to the spur, especially if the mainline is at-grade.

**Figure 2-1: 20-Mile Alignment and Location of Potential Maintenance and Storage Facilities**

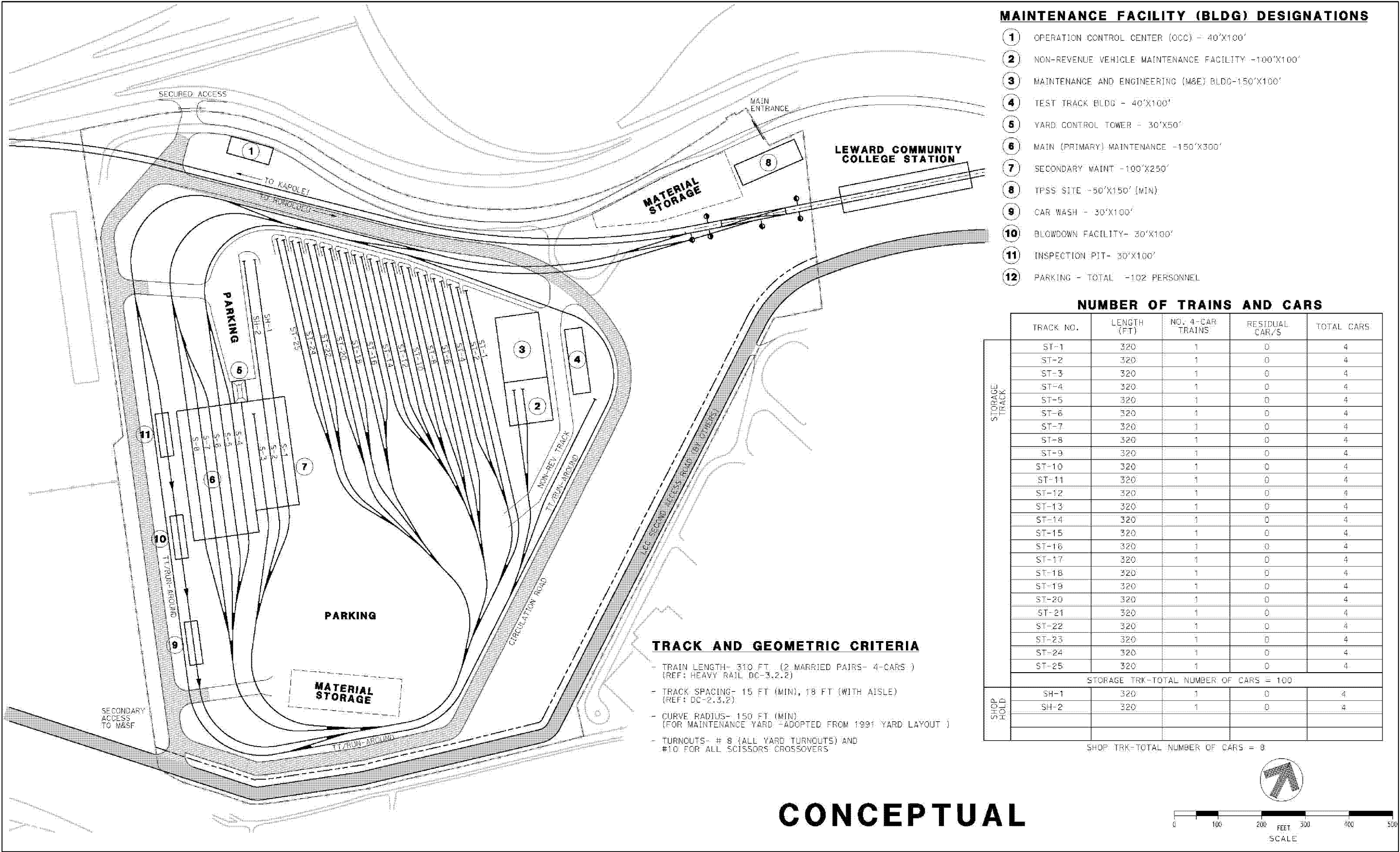
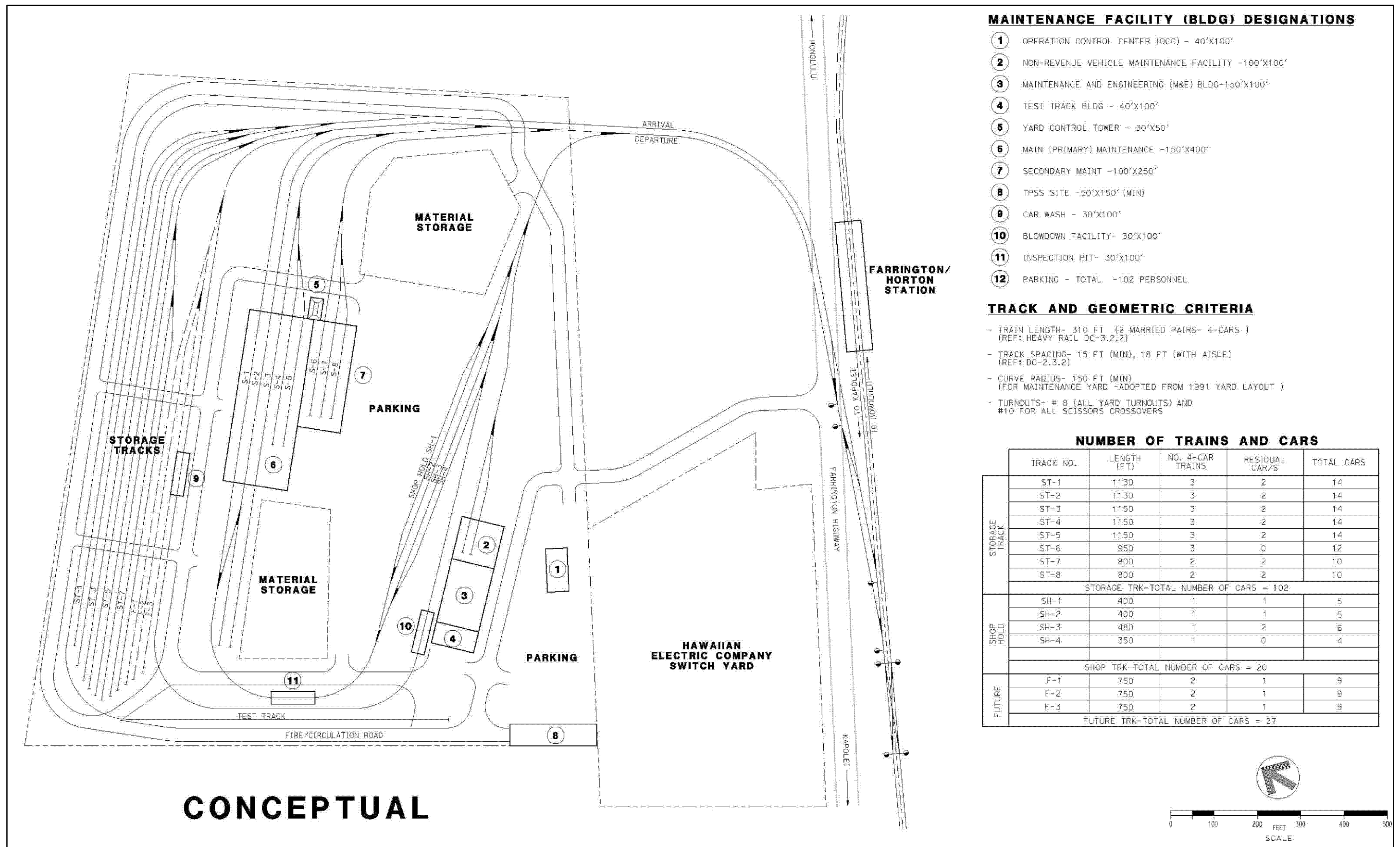


Figure 2-2: Waiawa Site Conceptual Design  
Maintenance and Storage Facility General Layout and Location Plans Memorandum  
Honolulu High-Capacity Transit Corridor Project



#### MAINTENANCE FACILITY (BLDG) DESIGNATIONS

- ① OPERATION CONTROL CENTER (OCC) - 40'X100'
- ② NON-REVENUE VEHICLE MAINTENANCE FACILITY -100'X100'
- ③ MAINTENANCE AND ENGINEERING (M&E) BLDG-150'X100'
- ④ TEST TRACK BLDG - 40'X100'
- ⑤ YARD CONTROL TOWER - 30'X50'
- ⑥ MAIN (PRIMARY) MAINTENANCE -150'X400'
- ⑦ SECONDARY MAINT -100'X250'
- ⑧ TPSS SITE -50'X150' (MIN)
- ⑨ CAR WASH - 30'X100'
- ⑩ BLOWDOWN FACILITY- 30'X100'
- ⑪ INSPECTION PIT- 30'X100'
- ⑫ PARKING - TOTAL -102 PERSONNEL

#### TRACK AND GEOMETRIC CRITERIA

- TRAIN LENGTH- 310 FT (2 MARRIED PAIRS- 4-CARS )  
(REF: HEAVY RAIL DC-3.2.2)
- TRACK SPACING- 15 FT (MIN), 18 FT (WITH AISLE)  
(REF: DC-2.3.2)
- CURVE RADIUS- 150 FT (MIN)  
(FOR MAINTENANCE YARD -ADOPTED FROM 1991 YARD LAYOUT )
- TURNOUTS- # 8 (ALL YARD TURNOUTS) AND  
#10 FOR ALL SCISSORS CROSSOVERS

#### NUMBER OF TRAINS AND CARS

	TRACK NO.	LENGTH (FT)	NO. 4-CAR TRAINS	RESIDUAL CAR/S	TOTAL CARS
STORAGE TRACK	ST-1	1130	3	2	14
	ST-2	1130	3	2	14
	ST-3	1150	3	2	14
	ST-4	1150	3	2	14
	ST-5	1150	3	2	14
	ST-6	950	3	0	12
	ST-7	800	2	2	10
	ST-8	800	2	2	10
STORAGE TRK-TOTAL NUMBER OF CARS = 102					
SHOP HOLD	SH-1	400	1	1	5
	SH-2	400	1	1	5
	SH-3	480	1	2	6
	SH-4	350	1	0	4
SHOP TRK-TOTAL NUMBER OF CARS = 20					
FUTURE	F-1	750	2	1	9
	F-2	750	2	1	9
	F-3	750	2	1	9
FUTURE TRK-TOTAL NUMBER OF CARS = 27					

Figure 2-3: Farrington Highway Site Conceptual Design

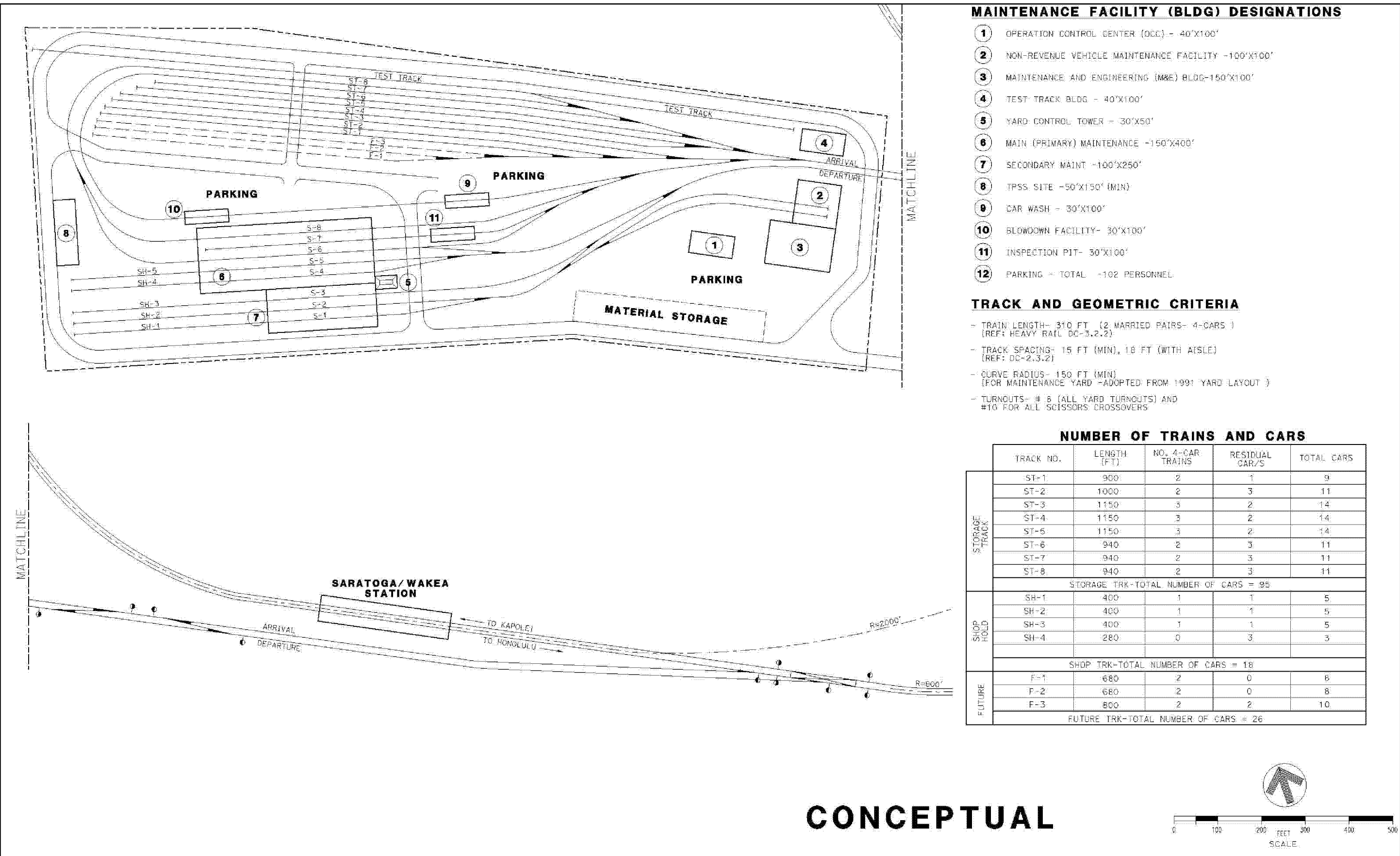


Figure 2-4: Kalaeloa Site Conceptual Design  
Maintenance and Storage Facility General Layout and Location Plans Memorandum  
Honolulu High-Capacity Transit Corridor Project

The Kalaeloa site is of particular concern because it is not certain that the initial build segment of the mainline will reach that far 'Ewa (the initial build of the mainline may terminate near the intersection of North-South Road and Saratoga Avenue, see Figure 2-1). Similar to the Farrington Highway site, the long spur could detract from the development opportunities for the area immediately adjacent to the spur. In addition, the potential grade separation issues would complicate the connection with the mainline.

### ***Interior Track Work and Design***

The maintenance and storage facility must include all the facilities required to maintain and store up to 100 train cars. The maintenance facilities typically associated with an installation of this type are listed on each of the conceptual site drawings (Figure 2-2, Figure 2-3, and Figure 2-4) and include a number of buildings, maintenance facilities, storage track, and parking. The track layouts presented are conceptual; significant modifications to the track layout would likely be required when the technology is selected and mainline horizontal and vertical geometry is refined.

There are several preferred design criteria for a maintenance and storage facility, the following of which provides some differentiation among the sites:

- The car wash, blowdown facility, and inspection pit all be in-line so that cars can be cleaned and inspected as they start or end service without having to reverse or change tracks.
- The line with car wash, blowdown facility, and inspection pit be located between the mainline and the storage area so that cars can move between the mainline and any storage track and access, or bypass, these facilities without having to reverse.
- Storage track be double-ended run-throughs to keep open flow and avoid reversing movements.

All three of the maintenance and storage facility sites are capable of maintaining and storing up to 100 train cars but there are significant differences in how well they achieve the preferred design criteria. The Farrington Highway site provides the greatest flexibility and current meets or has the potential to meet most of the design criteria. The Farrington Highway Site is flexible because its exact location and geometry remains flexible due to the undeveloped nature of the area. The Waiawa site meets most of the design criteria but the storage tracks are not double-ended at this time. The loss of double-ended storage track is somewhat remedied by the fact that the storage tracks are short (4 cars per track) and two tracks provide direct access to the mainline (so cars can simply reverse storage movement to enter service, provided all cars are bi-directional). The Kalaeloa site provides the least flexibility due to its long narrow configuration; the configuration could be modified in the future, if appropriate and acceptable to HCDA.

### ***Route of Delivery***

The maintenance and storage facility is where large items, such as the train cars, would be delivered and set on the system tracks. Delivery requires good access to the site by ground transportation. The Waiawa site has the least desirable ground access. The

proximity of the site to the Waiawa Interchange complicates ground access because the only access from any of the major roads to the site is via a relatively circuitous route over the H-1 Freeway on Ala 'Ike Street. In the past large Navy vehicles used this route to access the site so, although less desirable than the other potential sites, access is clearly possible. Emergency and special-case delivery (such as initial delivery of new train cars) could be done from the ramp connecting Farrington Highway east-bound to the H-1 Freeway eastbound.

Access to the Farrington Highway site is relatively easy directly from Farrington Highway.

Access to the Kalaeloa site would also be relatively easy via a number of roads planned for the area, including Wākea Street, Saratoga Avenue, and Kamokila Boulevard.

## **Air Quality**

Air quality issues are not anticipated to vary between the three maintenance and storage facility site options.

## **Energy Use**

Energy use issues are not anticipated to vary significantly between the three maintenance and storage facility site options. The slightly longer access required for trains to enter and exit the Farrington Highway and Kalaeloa sites should not result in the trains using significantly more energy relative to the Waiawa site.

## **Hazardous Materials**

The presence/absence of hazardous materials, waste, and contamination issues are not anticipated to vary significantly between the three potential maintenance and storage facility site options. The Waiawa and Kalaeloa sites were formerly occupied by the military, but have reportedly been cleaned up. The Farrington Highway site has presumably always been used for agricultural purposes and no hazardous substances are expected to be present at the site.

## **Historical and Cultural Considerations**

Historical and cultural considerations are not anticipated to vary significantly between the three maintenance and storage facility site options. The Waiawa and Kalaeloa sites were formerly used by the military and have been thoroughly disturbed. Although the Waiawa site is adjacent to Pearl Harbor, a National Historic Landmark, the area has been cleared for redevelopment. The Farrington Highway site has been thoroughly disturbed by farming activities.

## Land Use

First, it should be noted that a maintenance and storage facility is not considered a transit-oriented development (TOD) because it is not a high-density employment or residential facility. Ideally, TOD will be stimulated within at least a half-mile radius of each transit station. Therefore, it would be preferable to have the maintenance and storage facility located at least half a mile from any transit station. However, all three potential maintenance and storage facilities are within a quarter mile of a transit station so this criteria does not differential the sites.

Other land use factors do differentiate the sites though. Select land use information is summarized in Table 2-2.

The zoning at each of the three sites would have to be changed to allow the maintenance and storage facility. The planned use, if the site is not selected for development as the maintenance and storage facility, would also require zoning changes and those zoning changes are supported by the development plans for the areas. The planned use at the Kalaeloa site is “Light Industrial/Eco-Industrial” and, as stated in the Draft Kalaeloa Master Plan the site, “is considered to be a feasible and appropriate location for a base yard serving the proposed transit corridor alignment.” This sets the Kalaeloa site apart from the others because the development plan for the site identifies it as an appropriate location for the maintenance and storage facility; therefore, approvals to locate the facility at the Kalaeloa site would presumably be easier to obtain.

The planned neighboring site uses at the Kalaeloa site are more complementary to the presence of the maintenance and storage facility. None of the neighboring sites uses at either the Waiawa or Farrington Highway site are industrial in nature, except perhaps the HECO substation at the Farrington Highway site.

Both the Waiawa and Kalaeloa sites are currently vacant so no residence or business would be displaced if one of them were selected for the maintenance and storage facility. The Farrington Highway site is currently occupied by Aloun Farms. Improvements to the site area made by Aloun Farms include plant nursery shade areas, storage facilities, and operation buildings as well as orchards and fields. Aloun Farms, which leases the site from D. R. Horton, would be displaced by the maintenance and storage facility if the Farrington Highway site were selected.

The longer spurs between the mainline and the Farrington Highway and Kalaeloa sites would impact land use beyond the footprint of the maintenance and storage facility. The spurs would require additional right-of-way and limit land use options and development opportunities. This impact would be greatest if the spurs were at-grade and near transit stations where TOD would be impact by their presence.



**Table 2-2. Summary of Land Use in Vicinity of Site**

Site	Current Owner	Prior Use	Current Use	Current Zoning	Planned Use	Existing or Projected Neighboring Uses	Acquisition Possible?	Nearest Planned Station	Distance from Station (feet)
Waiawa	Navy / Dept. of Hawaiian Home Lands (DHHL)	Navy Fuel Storage and Delivery (including drums)	Vacant	AG-2	Hawaiian Homes or Light Industry	Highway, Leeward Community College, Pearl Harbor, and Waipahu High School	Possible Land Swap	Leeward Community College	60
Farrington Highway	D. R. Horton - Schuler Homes	Sugar Plantation Field	Truck-Crop Agriculture and Orchards	AG-1	Transit or Residential (D. R. Horton development)	Freeway, Transit Oriented Development (TOD), HECO substation	D. R. Horton Cooperating	Farrington / Horton	640 (but spur passes by station)
Kalaheoa	Navy / HCDA	Barbers Point Naval Air Station	Military / Vacant	F-1	Transit or Eco-Industrial (HCDA redevelopment)	Light Industrial, Mixed Use (high intensity TOD), Airport	Already Planned for Transit Use by HCDA	Saratoga / Wākea	750 (but spur passes by station)

Notes: AG-2 = general agricultural district; AG-2 = restricted agricultural; F-1 = military and federal preservation.

## Natural Resources

Natural resource issues, such as flora and fauna, are not anticipated to vary between the three maintenance and storage facility options. Each of the three sites has been significantly disturbed; no unusual species or habitat is anticipated at any of the sites.

## Noise and Vibration

Noise and vibration will be produced at the maintenance and storage facility. None of the potential maintenance and storage facility sites would produce less noise and vibration than the others unless grade separation issues alter the terrain and elevate sources of noise. Neighboring site uses are more or less susceptible to noise and vibration impacts at some sites than others. Noise and vibration concerns are somewhat reduced by the fact that each of the maintenance and storage facilities are near the transit mainline so surrounding sites will be impacted by noise and vibration from the operating mainline regardless of where the maintenance and storage facility is located. However, noise and vibration would be produced at the maintenance and storage facility at a greater frequency and for a greater portion of each day than the mainline.

The Waiawa site is sandwiched between Waipahu High School to the southwest and Leeward Community College to the northeast. Pearl Harbor is located to the southeast and a bike path is located between the potential maintenance and storage facility site and the harbor. The two schools and the bike path are susceptible to noise and vibration impacts. Topography and distance would limit some of the potential impact and the proximity of major highways, including H-1 freeway, would also make the magnitude of impact appear less.

The Farrington Highway site is located just south of the H-1 freeway, which is a significant noise generator itself. There is also a HECO transmission station to the south of the site. The HECO site does not generate much noise but would not be impacted by noise from the maintenance and storage facility. Planned development to the east, south, and west of the Farrington Highway site would likely include residential development by D. R. Horton and would be susceptible to noise and vibration impacts.

The Kalaeloa site is surrounded on three sides by other industrial sites, including airport functions. Barbers Point Elementary School is currently located to the north of the Kalaeloa site; the Draft Kalaeloa Master Plan recommends the school be relocated to a different location within Kalaeloa. Other areas north of the Kalaeloa site are planned for industrial and high-intensity mixed use development. These site uses surrounding the Kalaeloa site are less sensitive to noise and vibration than the uses surrounding the other potential maintenance and storage facility sites.

## Social Elements

Social elements are not anticipated to vary significantly between the three maintenance and storage facility site options. The location of the maintenance and storage facility is

not anticipated to have a significant impact on the nearby community or the social fabric of the island.

As shown in the Land Use section, if the Waiawa site was selected for the maintenance and storage facility, it would displace a potential DHHL development. To date the DHHL has not advanced any development plans for the site. If the Waiawa site were selected, another piece of land of similar value would be provided to DHHL for development.

## **Traffic**

The presence of the maintenance and storage facility would generate traffic in the community it is placed in. At least a portion of the workers at the site would be on alternative shifts because they would have to start work prior to the trains leaving the site (likely around 4:00 a.m.) and another shift would have to stay until the trains return to the site (likely around midnight). These shifts would mean commutes to the facility would be staggered relative to traditional commute times. The train car drivers, conductors, or other required personnel would also be on staggered shifts. Other trips generated by the presence of the maintenance and storage facility would include deliveries, which would occur throughout the day but are not anticipated to be a significant trip generator.

The number of employees planned for the maintenance and storage facility (approximately 100) is relatively small for the size of the facility (35 acres). Other uses of the potential maintenance and storage sites (light industrial or residential) would likely attract more commuters or generate more trips to the site. At the Kalaeloa and Farrington Highway sites traffic is probably not an issue because access to the site and traffic in the area is not a significant issue. At the Waiawa site, however, the access roads are already near or at capacity during peak commute hours. Adding a new significant peak-hour trip generator at the Waiawa site, such as a light industrial or medium-density residential development, would further strain the traffic situation in the vicinity of the site. Therefore, from a traffic standpoint, the use of the Waiawa site for the maintenance and storage facility would alleviate some traffic concerns relative to other planned uses for the site.

## **Visual Impacts**

Visual impacts are not anticipated to vary significantly between the three maintenance and storage facility site options. However, the Waiawa site will probably have the least impact because the alignment will be at-grade through the facility, the spur off the mainline is short, and no grade-separation for road crossings will be required.

## **Water Resources**

Water resource issues are not anticipated to vary significantly between the three maintenance and storage facility site options. All three potential maintenance and storage facility options are located over the Southern O'ahu Basal Aquifer (SOBA), a sole source drinking water aquifer. However, all three sites are located in areas where

caprock provides some protection of the SOBA. Installation and proper management of a maintenance and storage facility at any of the three sites is not anticipated to be a threat to the SOBA.

Although both the Waiawa and Farrington Highway sites are near or include some flood zones, the area that would be developed for the maintenance and storage facility is outside of the flood zone area.

The Waiawa and Farrington Highway sites are nearer surface water bodies than the Kalaeloa site, but it is assumed that best management practices (BMPs) could be installed at each site equally to prevent the runoff of pollution or polluted storm water.

## Cost

Generally the cost to build and subsequently operate the maintenance and storage facility would be similar for all three potential sites. A few factors may increase or decrease the cost to build each site relative to the others. These are summarized in Table 2-3 below.

***Table 2-3. Summary of Cost Factors***

<b>Site</b>	<b>Increase Cost</b>	<b>Decrease Cost</b>
Waiawa	Requires land swap rather than direct purchase. Requires significant grading and retaining walls. May require noise abatement. Requires land management beyond operational area.	Spur track is short and at grade.
Farrington Highway	Requires land purchase or donation from D.R. Horton. Requires some grading. Long spur required off mainline. May require noise abatement.	Interior track work is efficient.
Kalaeloa	Interior track work is not efficient. Long spur required off mainline.	Site owned by State and planned for transit use.

## Evaluation Overview

Table 2-4 summarizes the evaluation of each potential maintenance and storage facility site for the assessment criteria. For each criterion each site is ranked 1 to 3 with 1 being the best and 3 the worst; therefore, the lowest total score is the preferred maintenance and storage facility site based on the criteria discussed in this memorandum.

**Table 2-4. Overview of Site Evaluation**

<b>Criteria</b>	<b>Waiawa Site</b>	<b>Farrington Highway Site</b>	<b>Kalaeloa Site</b>
Engineering – Connection with Mainline	1	2	3
Engineering – Interior Track Work and Design	2	1	3
Engineering – Route of Delivery	3	1	2
Air Quality	1	1	1
Energy Use	2	2	2
Hazardous Materials	2	2	2
Historical and Cultural Considerations	2	2	2
Land Use	2	2	1
Natural Resources	2	2	2
Noise and Vibration	2	2	1
Social Elements	2	2	2
Traffic	1	2	2
Visual Impacts	1	2	2
Water Resources	2	2	2
Cost	3	2	1
<b>Total</b>	<b>28</b>	<b>27</b>	<b>28</b>

Note: 1 is best, 3 is worst

Based on this analysis the Farrington Highway site would be the preferred site. The Waiawa and Kalaeloa sites are not far behind based on the rankings in Table 2-4. However, the “Engineering – Connection with Mainline” ranking (3 - worst) for the Kalaeloa site is not truly representative of the situation. Because the 20-mile alternative does not reach the Kalaeloa site it should really be ranked a 10 instead of 3. This reality separates the Kalaeloa site from the other two and indicates it should be eliminated from further consideration.

Both the Waiawa and Farrington Highway sites meet the general engineering requirements for location of a maintenance and storage facility. Given the relative similarity of the overall evaluation for the Waiawa and Farrington Highway sites, the City should select between those two based on the outcome of property acquisition negotiations with both land owners.